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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,714	04/13/2004	Teruhisa Saito	H&A-129	3050

7590 06/14/2005

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EXAMINER	
BHAT, ADITYA S	
ART UNIT	**PAPER NUMBER**
2863	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/822,714	SAITO, TERUHISA	
	Examiner	Art Unit	
	Aditya S. Bhat	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/26/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamakawa et al. (USPN 6,134,960) .

With regards to claim 1, Yamakawa et al. (USPN 6,134,960) teaches an in-vehicle electronic device comprising: a conductor member; (Col.8, lines 44-45)

an insulation member; (Col.8, lines 34-35) and

an amplifying means for inputting signals from a first signal line and a second signal line and outputting amplified signals, wherein said conductor member is provided to cover at least one of said first signal line and said second signal line via said insulation member. (35; Refer to figure 5) (Col.13, lines 47-51)

With regards to claim 2, Yamakawa et al. (USPN 6,134,960) teaches a supporting means for supporting said first signal line, said second signal line and said amplifying means, wherein said conductor member covers, via said insulation member, any one of said first signal line and said second signal line in the opposite side of said signal line supported with said supporting means. (Refer to figure 5)

With regards to claim 3, Yamakawa et al. (USPN 6,134,960) teaches amplifying means is an operational amplifier, said supporting means is a circuit board, said first

and second signal lines are metal wirings printed on said circuit board, and said insulation member and conductor member are formed as layers. (Refer to figure 5)

With regards to claim 4, Yamakawa et al. (USPN 6,134,960) teaches conductor member covers another signal line of said first and second signal lines via said insulation member. (Col.8, lines 54-59)

With regards to claim 5, Yamakawa et al. (USPN 6,134,960) teaches a thermal flowmeter comprising:

a heat generating resistance body provided in the path through which the air flows; (Col.8, lines 55-56) and

an electronic circuit board including an amplifying means for inputting signals from a first signal line and a second signal line and outputting the amplified signals and a conductor member for covering at least any one of said first signal line and said second signal line via an insulation member, wherein the signal from said resistance body is inputted to said first signal line to measure flow rate of the air flowing through said path. (Refer to figure 5) (Col.8, lines 44-45)

With regards to claim 6, Yamakawa et al. (USPN 6,134,960) teaches an electronic circuit board including a conductor layer for circuit formed on an insulated board, wherein a conductor not electrically connected to anywhere is formed, via an insulation layer, in the vicinity of a part of conductor connected to the positive input signal of an operational amplifier of the circuit portion allocated on said conductor layer for circuit and formed of a monolithic IC and a part of conductor connected to the

negative input signal of said operational amplifier. (Col. 8, lines 34-36) (Refer to figure 5)

With regards to claim 7, Yamakawa et al. (USPN 6,134,960) teaches a metal plate not connected electrically to anywhere is formed, via the insulation layer, in the vicinity of a part of conductor connected to the positive input signal of the operational amplifier of the circuit portion allocated on said conductor layer for circuit and formed of the monolithic IC and a part of conductor connected to the negative input signal of said operational amplifier. (Refer to figure 5)

With regards to claim 8, Yamakawa et al. (USPN 6,134,960) teaches both positive and negative input signal conductors of said operational amplifier of said circuit portion allocated on said conductor layer for circuit and formed of the monolithic IC are respectively connected to the center conductors of different shielded wires and the covering conductors of said shielded wires are not connected electrically to anywhere.

With regards to claim 9, Yamakawa et al. (USPN 6,134,960) teaches the thermal flowmeter provided with the electronic circuit board. (Refer to figure 5)

With regards to claim 10, Yamakawa et al. (USPN 6,134,960) teaches the circuit board for electronic circuit forms a part of the conductor in which a metal plate not connected electrically to anywhere is connected, via the insulation layer, to the positive input signal of the operational amplifier of the circuit portion allocated on the conductor layer for circuit and formed of the monolithic IC and also forms a part of the conductor connected to the negative input signal of said operational amplifier. (Col. 8, lines 34-36)

With regards to claim 11, Yamakawa et al. (USPN 6,134,960) teaches both positive and negative input signal conductors of the operational amplifier of the circuit portion allocated on said conductor layer for circuit and formed of the monolithic IC are respectively connected to the center conductor of the shield wires and the covering conductors of said shield wires are terminated with each other and are not connected electrically to anywhere. (35; Refer to figure 5)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kondo et al (USPN 5,756,893) teaches a thermal flow meter, Abe et al. (USPUB 2003/0087448) teaches a electronic device and thermal type flow meter on a vehicle and Ewing et al. (USPN 4,464,932) teaches thermal mass flow metering

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S. Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aditya Bhat
June 8, 2005

John Barlow
Supervisory Patent Examiner
Technology Center 2800